

Keywords: Predictive signs; Difficulty swallowing; Disorders; Stroke-phasic arousal; TPM-NBI

Introduction.– Eating and drinking are skills humans have in their survival kit. Sixty to 80% of patients with a stroke have swallowing disorders. Our objective was to determine the most predictive signs of interest in the course of this disease. **Method.**– During the year 2010, we managed 40 patients with stroke in our unit. We identified 7 criteria that we feel are essential in monitoring parallel swallowing disorders: maximum phonation time (TPM), speech, narrow band imaging (NBI) (light green), the gag reflex, arousal, sensitivity, and facial paralysis. **Results.**– The average age was 73 years, range 41 to 90 years. The stroke was ischemic in 33 cases (82.5%) and hemorrhagic in 7 cases (17.5%). The lesion occurred in the brain stem in 10 cases (25%) and in the hemispheres in 30 cases (75%). The motor deficit was right in 27 cases (67.5%), left in 13 cases (32.5%). **Discussion.**– Two signs appeared to us as essential: phasic disorders (present in 75% of cases), and arousal disorders (present in 30% cases), which precede the improvement or changes associated with swallowing disorders. The TPM could not always be measured but from 10 s, it was a good sign for recovery. NBI or green light showed impaired microvasculature in 47% of patients and its presence was useful for monitoring outcome course. The gag reflex (80% of cases) was less critical. The loss of sensitivity had greater importance for the swallowing reflex or rehabilitation. Facial paralysis (50% of cases) was troublesome for mouth movements but not significantly.

Conclusion.– Three clinical signs (phasic disorders, arousal, TPM) and one exploration result (NBI) are the elements whose time course (improvement or stagnation) goes hand in hand with swallowing. They evolve separately but together greatly affect the prognosis. Other criteria (gag reflex, sensitivity, facial palsy) are interesting but less discriminating.

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A systematic multidisciplinary approach to swallowing disorders in neurological rehabilitation units: From care harmonization to therapeutic education
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Keywords: Swallowing; Stroke; Therapeutic education

Objective.– Swallowing disorders are frequent in neurological rehabilitation settings and worry the patient, the family and the medical staff. They may be severe and lead to infections, reduced food intake, and referral to acute care. We report on a systematic multidisciplinary approach to this problem conducted over the past five years. **Methods.**– We defined the different steps in the approach to swallowing disorders after stroke. The role of each professional and the key points were listed (texture, standard meal on admission, observation of meal intake, assessment of swallowing by the speech therapist and physiotherapist) [1]. A specific information session was designed and included to both the nursing and kitchen staff. **Results.**– The coordination between the kitchen staff, the nursing staff, the dietician, the physiotherapist, the speech therapist, the physician, and the patient has been improved. The fears of all participants when resuming oral intake have decreased. The delay to achieve changes in food texture has been reduced. Patients and caregivers receive better information. **Discussion.**– This multidisciplinary approach has been extended to all patients regardless of the origin of their disease. This program is going to be modified in order to comply with the SOFMER recommendations for therapeutic education [2].

References
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Relevance of videofluoroscopy after systematic fiberendoscopic evaluation in the assessment of swallowing disorders due to neurological diseases
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Aim.– Indications of videofluoroscopy in the assessment of neurological swallowing disorders following initial systematic fiberendoscopy. **Patients and methods.**– Prospective study in a center of assessment for swallowing neurological disorders by an ENT and a physiatrist. First assessment: questioning of the patient and his entourage, clinical neurological examination, swallowing videoendoscopy. A videofluoroscopy may be proposed subsequently. Hundred and fifty-three patients were examined at least once between 2008 and 2010. The criteria indicating or not the subsequent implementation of fluoroscopy are analyzed. **Results.**– The performance criteria for subsequent videofluoroscopy are:
– insufficient global assessment of the swallowing process (necessity for further assessment of the impact of extrinsic compressions, pharyngeal myoclonus. . .);
– overall assessment of swallowing non-concordant with the symptomatic complaints of the patients or his entourage (by excess or by defect);
– difficulties of visibility during the fiberoptic examination (posterior tongue, extrinsic compression);
– necessity to visualize oesophagus;
– necessity to carry out swallowing assessment in more “physiological” conditions without discomfort induced by the endoscopy (hyper-reflectivity, behavioral disorders. . .);
– necessity to do further evaluation of a liberalized bolus transit (for example checking the efficiency of different postures whilst swallowing).

The two most limiting elements of fluoroscopy appear to be the difficulties in positioning the patient and the limited choice of the texture to be swallowed. **Discussion.**– These findings are compared with literature. Videofluoroscopy does not appear to be an indispensable examination in the initial assessment of swallowing disorders due to neurological diseases; it may be useful subsequently in some cases. We always start with a fiberendoscopic evaluation. This procedure is minimally invasive, non-radiating, and achievable in simple conditions, ideally within a multidisciplinary team specifically dedicated to this assessment.

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Submental sensitive transcutaneous electrical stimulation (SSTES) to treat neurogenic oropharyngeal dysphagia
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Background.– Oropharyngeal dysphagia is frequent in chronic neurological disorders and increases mortality, mainly due to pulmonary complications.